

REMARKS

Claims 29-42, 73-82, and 85-141 are pending in the present application. Claims 83 and 84 have been canceled without prejudice or disclaimer to the subject matter contained therein.

It is noted that in the remarks below, the various arguments have been given headings to assist the Examiner in reconsidering the various rejections. It is further noted that the argument sub-heading "I" was intentionally skipped to avoid confusion with the Roman Numerals in the Rejection main headings.

I. OBJECTION TO CLAIMS 29, 85, 112, AND 122

Claims 29, 85, 112, and 122 have been objected to for various informalities.

The Applicants have thoroughly reviewed the presently pending claims and have amended the claims, where appropriate, to resolve the informalities noted by the Examiner.

Accordingly, in view of the above amendments and remarks, the Applicants respectfully request the Examiner reconsider and withdraw this objection.

II. REJECTION of CLAIMS 92, 93, 96-98, 104, 112-116, 118, and 122-125 under 35 U.S.C.

§102(b) over ERICSON

Claims 92, 93, 96-98, 104, 112-116, 118, and 122-125 have been rejected under 35 U.S.C. §102(b) as being anticipated by Ericson (US-A-3,424,151). This rejection of claims 92, 93, 96-98, 104, 112-116, 118, and 122-125 under 35 U.S.C. §102(b) over the teachings of Ericson is respectfully traversed.

In formulating the rejection under 35 U.S.C. § 102(b), the Examiner alleges that Ericson discloses a device for applying pressure to a body limb having a primary axis, wherein the device comprising an inflatable cell. The Examiner further alleges that Ericson discloses an inflatable cell includes at least two intra-cell compartments, which are confluent with each intra-cell compartment being elongated in a direction of the primary axis. The Examiner also alleges that Ericson discloses that the adjacent intra-cell compartments are spatially fixed relative to each other such that upon inflation, the cell becomes circumferentially constricted.

To further support the rejection, the Examiner concludes, without providing any explicit evidence of actual teachings on the part of Ericson, that the inflatable cell of Ericson has a first center point circumference of $N\pi r$ when the intra-cell compartments are deflated and a second center point circumference $2Nr$ when the intra-cell compartments are inflated, the second center point circumference being less than the first center point circumference so as to provide circumferential constriction. The Examiner also concludes, again without providing any explicit evidence of actual teachings on the part of Ericson, that during inflation, the compartmental bonds are drawn toward each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction.

These positions by the Examiner are respectfully traversed.

A. ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 92

With respect to independent claim 92 explicitly sets forth specific structure for the intra-cell compartments and the sleeve itself. More specifically, independent claim 92 expressly sets forth that the sleeve has a first intra-cell compartment center point circumference when said intra-cell compartments are deflated and a second intra-cell compartment center point circumference when said intra-cell compartments are inflated, said second intra-cell compartment center point circumference being less than said first intra-cell compartment center point circumference so as to provide for circumferential constriction, said first and second intra-cell compartment center point circumferences, each being defined as a line passing through each center points of each contiguous intra-cell compartment of an inflatable cell, and **the compartmental bonds of said intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of said intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction.**

In addressing the limitations of independent claim 92 directed to the circumferential dimensional relationship between inflated and deflated intra-cell compartments, the Examiner contends that the claimed spatial relationship between the compartmental bonds of the intra-cell compartments during inflation is taught by Ericson, notwithstanding the fact that Ericson is void

of any teaching or showing of such a relationship.

As clearly taught by Ericson at column 3, lines 13-19, the inner wall 24 “moves segmentally axially toward the center of the sleeve,” thereby allowing the inner wall 24 to collapse upon the extremity within the sleeve. Ericson clearly teaches the sleeve is designed to be used for a splint and thus, one would not want compression being applied to a fractured limb, thereby subjecting the limb to further damage or injury.

More specifically, for the claimed spatial relationship of the present invention, namely the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, to be realized by the sleeve of Ericson, the outer wall 22 must, as the inner wall 24 moves inwardly, move outwardly. In comparison, Ericson explicitly teaches and illustrates that the outer wall 22 moves inwardly to form a triangular shape. This inward motion drives the bonds apart, as well as drives the bonds away from the center point of said intra-cell compartments, as the outer wall 22 goes from an arc shape to a more linear shape.

Only by realizing opposing movements; i.e., the outer wall 22 moves outwardly while the inner wall 24 moves inwardly; can the compartmental bonds 26 and 28 realize the claimed spatial relationship during inflation.

In summary, Ericson neither explicitly teaches nor illustrates such a spatial relationship (drawing together), but explicitly teaches an opposite spatial relationship (drawing apart). Moreover, such a spatial relationship would be contrary to the stated goals of Ericson's sleeve, namely the immobilization of an injured limb without causing further damage.

Therefore, Ericson fails to anticipate that the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth in independent claim 92.

B. ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 97

With respect to independent claim 97 explicitly sets forth specific structure for the intra-

cell compartments and the sleeve itself. More specifically, independent claim 97 expressly sets forth that the sleeve has a first intra-cell compartment center point circumference when said intra-cell compartments are deflated and a second intra-cell compartment center point circumference when said intra-cell compartments are inflated, said second intra-cell compartment center point circumference being less than said first intra-cell compartment center point circumference so as to provide for circumferential constriction, said first and second intra-cell compartment center point circumferences, each being defined as a line passing through each center points of each contiguous intra-cell compartment of an inflatable cell, and **the compartmental bonds of said intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of said intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction.**

In addressing the limitations of independent claim 97 directed to the circumferential dimensional relationship between inflated and deflated intra-cell compartments, the Examiner contends that the claimed spatial relationship between the compartmental bonds of the intra-cell compartments during inflation is taught by Ericson, notwithstanding the fact that Ericson is void of any teaching or showing of such a relationship.

As clearly taught by Ericson at column 3, lines 13-19, the inner wall 24 “moves segmentally axially toward the center of the sleeve,” thereby allowing the inner wall 24 to collapse upon the extremity within the sleeve. Ericson clearly teaches the sleeves is design to be used for a splint and thus, one would not want compression being applied to a fractured limb, thereby subjecting the limb to further damage or injury.

More specifically, for the claimed spatial relationship of the present invention, namely the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, to be realized by the sleeve of Ericson, the outer wall 22 must, as the inner wall 24 moves inwardly, move outwardly. In comparison, Ericson explicitly teaches and illustrates that the outer wall 22 moves inwardly to form a triangular shape. This inward motion drives the bonds apart, as well as drives the bonds away from the center point of said intra-cell

compartments, as the outer wall 22 goes from an arc shape to a more linear shape.

Only by realizing opposing movements; i.e., the outer wall 22 moves outwardly while the inner wall 24 moves inwardly; can the compartmental bonds 26 and 28 realize the claimed spatial relationship during inflation.

In summary, Ericson neither explicitly teaches nor illustrates such a spatial relationship (drawing together), but explicitly teaches an opposite spatial relationship (drawing apart). Moreover, such a spatial relationship would be contrary to the stated goals of Ericson's sleeve, namely the immobilization of an injured limb without causing further damage.

Therefore, Ericson fails to anticipate that the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth in independent claim 97.

C. ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 112

With respect to independent claim 112 explicitly sets forth specific structure for the intra-cell compartments and the sleeve itself. More specifically, independent claim 112 expressly sets forth that the sleeve has a first center point circumference when the intra-cell compartments are deflated, and that the sleeve has a second center point circumference when the intra-cell compartments are inflated wherein the center point circumference is a line passing through each center point of each adjacent intra-cell compartment of said inflatable cell, and the second center point circumference is less than the first center point circumference, and **the compartmental bonds, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of said intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction.**

In addressing the limitations of independent claim 112 directed to the circumferential dimensional relationship between inflated and deflated intra-cell compartments, the Examiner contends that the claimed spatial relationship between the compartmental bonds of the intra-cell compartments during inflation is taught by Ericson, notwithstanding the fact that Ericson is void of any teaching or showing of such a relationship.

As clearly taught by Ericson at column 3, lines 13-19, the inner wall 24 “moves segmentally axially toward the center of the sleeve,” thereby allowing the inner wall 24 to collapse upon the extremity within the sleeve. Ericson clearly teaches the sleeve's design to be used for a splint and thus, one would not want compression being applied to a fractured limb, thereby subjecting the limb to further damage or injury.

More specifically, for the claimed spatial relationship of the present invention, namely the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, to be realized by the sleeve of Ericson, the outer wall 22 must, as the inner wall 24 moves inwardly, move outwardly. In comparison, Ericson explicitly teaches and illustrates that the outer wall 22 moves inwardly to form a triangular shape. This inward motion drives the bonds apart, as well as drives the bonds away from the center point of said intra-cell compartments, as the outer wall 22 goes from an arc shape to a more linear shape.

Only by realizing opposing movements; i.e., the outer wall 22 moves outwardly while the inner wall 24 moves inwardly; can the compartmental bonds 26 and 28 realize the claimed spatial relationship during inflation.

In summary, Ericson neither explicitly teaches nor illustrates such a spatial relationship (drawing together), but explicitly teaches an opposite spatial relationship (drawing apart). Moreover, such a spatial relationship would be contrary to the stated goals of Ericson's sleeve, namely the immobilization of an injured limb without causing further damage.

Therefore, Ericson fails to anticipate that the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth in independent claim 112.

D. ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 122

With respect to independent claim 122 explicitly sets forth specific structure for the intra-cell compartments and the sleeve itself. More specifically, independent claim 122 expressly sets

forth that the sleeve has a first center point circumference when the intra-cell compartments are deflated, and that the sleeve has a second center point circumference when the intra-cell compartments are inflated wherein the center point circumference is a line passing through each center point of each adjacent intra-cell compartment of said inflatable cell, and the second center point circumference is less than the first center point circumference, and the second center point circumference is less than the first center point circumference, and **the compartmental bonds, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of said intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction.**

In addressing the limitations of independent claim 122 directed to the circumferential dimensional relationship between inflated and deflated intra-cell compartments, the Examiner contends that the claimed spatial relationship between the compartmental bonds of the intra-cell compartments during inflation is taught by Ericson, notwithstanding the fact that Ericson is void of any teaching or showing of such a relationship.

As clearly taught by Ericson at column 3, lines 13-19, the inner wall 24 “moves segmentally axially toward the center of the sleeve,” thereby allowing the inner wall 24 to collapse upon the extremity within the sleeve. Ericson clearly teaches the sleeves is design to be used for a splint and thus, one would not want compression being applied to a fractured limb, thereby subjecting the limb to further damage or injury.

More specifically, for the claimed spatial relationship of the present invention, namely the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, to be realized by the sleeve of Ericson, the outer wall 22 must, as the inner wall 24 moves inwardly, move outwardly. In comparison, Ericson explicitly teaches and illustrates that the outer wall 22 moves inwardly to form a triangular shape. This inward motion drives the bonds apart, as well as drives the bonds away from the center point of said intra-cell compartments, as the outer wall 22 goes from an arc shape to a more linear shape.

Only by realizing opposing movements; i.e., the outer wall 22 moves outwardly while the inner wall 24 moves inwardly; can the compartmental bonds 26 and 28 realize the claimed

spatial relationship during inflation.

In summary, Ericson neither explicitly teaches nor illustrates such a spatial relationship (drawing together), but explicitly teaches an opposite spatial relationship (drawing apart). Moreover, such a spatial relationship would be contrary to the stated goals of Ericson's sleeve, namely the immobilization of an injured limb without causing further damage.

Therefore, Ericson fails to anticipate that the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth in independent claim 122.

E. ARGUMENTS WITH RESPECT TO DEPENDENT CLAIMS 93, 96, 98, 104, 113-116, 118 & 123-25

With respect to dependent claims 93, 96, 98, 104, 113-116, 118, and 123-125, the Applicants, for the sake of brevity, will not address the reasons supporting patentability for each of these individual dependent claims, as these claims depend directly or indirectly from the various allowable independent claims for the reasons set forth above. The Applicant reserves the right to address the patentability of each of these dependent claims at a later time, should it be necessary.

Accordingly, in view of the remarks set forth above, the Examiner is respectfully requested to reconsider and withdraw this rejection under 35 U.S.C. §102(b) over Ericson.

III. REJECTION OF CLAIMS 29-33, 35, 36, 39-41, 73-75, 78-81, 83-90, 92-95, 97-103, 105, 108-110, 112-116, 118-128, 131-133, 135, and 138-140 under 35 U.S.C. §103 over DYE in view of SCHNEIDER and ERICSON

Claims 29-33, 35, 36, 39-41, 73-75, 78-81, 83-90, 92-95, 97-103, 105, 108-110, 112-116, 118-128, 131-133, 135, and 138-140 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Dye (US-A-5,795,312) in view of Schneider (US-A-4,206,751) and Ericson (US-A-3,424,151). This rejection is respectfully traversed.

In formulating the rejection under 35 U.S.C. § 103(b), the Examiner alleges that Dye discloses all the various components except for some of the specifically claimed structure of the sleeve. To meet these deficiencies in Dye, the Examiner proposes to modify the teachings of Dye with the teachings of Schneider and Ericson. From the proposed modifications, the Examiner concludes that the presently claimed invention would be obvious to one of ordinary skill in the art.

These positions by the Examiner are respectfully traversed.

A. ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 29

With respect to independent claim 29, independent claim 29 sets forth a device for applying pressure to a body limb having a primary axis. The device, as recited in independent claim 29, includes first and second inflatable cells, each of the first and second cells including at least three intra-cell compartments; the intra-cell compartments being confluent, each compartment being elongated along a primary axis of a body limb and being substantially rectangular in shape when deflated and substantially cylindrical in shape when inflated, cylindrical axes of the inflated compartments substantially aligning with the primary axis of the limb, the first and second cells being longitudinally adjacent each other, and arranged coaxially with respect to the primary axis of the limb, the first and second cells being intermittently inflatable to apply pressure to the limb, wherein the inflatable cells each comprise inner and outer shells of durable flexible material, the inner and outer shells being bonded together to form a perimetric cell bond to define the inflatable cell therebetween, the inner and outer shells being further bonded together to form compartmental bonds within the perimetric cell bond to define the plurality of intra-cell compartments, wherein the perimetric cell bond includes upper and lower perimetric cell bonds extending substantially in a lateral direction, and left and right perimetric cell bonds extending substantially in the longitudinal direction, and wherein the compartmental bonds partly extend between the upper and lower perimetric cell bonds, wherein the compartmental bonds include perforations to allow for confluent air flow between compartments within a cell, neighboring compartments along a lateral axis sharing a common border and being spatially fixed relative to each other, such that upon inflation of a cell, the cell becomes circumferentially constricted, the first and second cells being non-confluent such that

the first and second cells are separately inflatable; means for laterally coupling outermost compartments so as to form a said sleeve substantially cylindrically; inflating means for intermittently inflating the first and second cells; and control means for determining a treatment specificity of each cell and for determining a timing sequence for inflating of each cell based on the determined treatment specificity of each cell. The sleeve has a center point circumference of $N\pi r$ when the cell is deflated and a center point circumference of $2Nr$ when the cell is inflated, where N is the number of compartments in the cell, and where r is the cross-sectional radius of each compartment when inflated, the center point circumference being a line passing through each center point of each adjacent intra-cell compartment of said inflatable cell. The compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction.

In the present rejection, the Examiner alleges that Dye teaches a control means within the sequential compression device is used to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner proffers this allegation, with respect to the teachings of Dye, the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a proffered allegation.

The reason that the Examiner has failed to clearly and particularly point out where Dye teaches such a control means is because Dye fails to teach such a specific device. More specifically, Dye fails to disclose any determination of the treatment specificity of any cell, let alone each cell. Moreover, Dye fails to disclose any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity. Thus, in view of the failure of Dye to provide any reasonable teachings directed to these determinations, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

In summary, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth in independent claim 29:

- (1) the determination of a treatment specificity of each cell; and

(2) the determination of a timing sequence for inflation of each cell based on the determined treatment specificity.

B. ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 36

With respect to independent claim 36, independent claim 36 expressly sets forth a control device that determines a treatment specificity of each cell and a timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

In the present rejection, the Examiner alleges that Dye teaches a control means within the sequential compression device is used to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner proffers this allegation, with respect to the teachings of Dye, the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a proffered allegation.

The reason that the Examiner has failed to clearly and particularly point out where Dye teaches such a control means is because Dye fails to teach such a specific device. More specifically, Dye fails to disclose any determination of the treatment specificity of any cell, let alone each cell. Moreover, Dye fails to disclose any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity. Thus, in view of the failure of Dye to provide any reasonable teachings directed to these determinations, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

In summary, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth in independent claim 36:

- (1) the determination of a treatment specificity of each cell; and
- (2) the determination of a timing sequence for inflation of each cell based on the determined treatment specificity.

C. ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 73

With respect to independent claim 73, independent claim 73 expressly sets forth a control device that determines a treatment specificity of each cell and a timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

In the present rejection, the Examiner alleges that Dye teaches a control means within the sequential compression device is used to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner proffers this allegation, with respect to the teachings of Dye, the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a proffered allegation.

The reason that the Examiner has failed to clearly and particularly point out where Dye teaches such a control means is because Dye fails to teach such a specific device. More specifically, Dye fails to disclose any determination of the treatment specificity of any cell, let alone each cell. Moreover, Dye fails to disclose any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity. Thus, in view of the failure of Dye to provide any reasonable teachings directed to these determinations, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

In summary, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth in independent claim 73:

- (1) the determination of a treatment specificity of each cell; and
- (2) the determination of a timing sequence for inflation of each cell based on the determined treatment specificity.

D. ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 75

With respect to independent claim 75, independent claim 75 expressly sets forth a control device that determines a treatment specificity of each cell and a timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

In the present rejection, the Examiner alleges that Dye teaches a control means within the sequential compression device is used to determine a treatment specificity of each cell and

determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner proffers this allegation, with respect to the teachings of Dye, the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a proffered allegation.

The reason that the Examiner has failed to clearly and particularly point out where Dye teaches such a control means is because Dye fails to teach such a specific device. More specifically, Dye fails to disclose any determination of the treatment specificity of any cell, let alone each cell. Moreover, Dye fails to disclose any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity. Thus, in view of the failure of Dye to provide any reasonable teachings directed to these determinations, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

In summary, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth in independent claim 75:

- (1) the determination of a treatment specificity of each cell; and
- (2) the determination of a timing sequence for inflation of each cell based on the determined treatment specificity.

E. ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 85

With respect to independent claim 85, independent claim 85 expressly sets forth a control device that determines a treatment specificity of each cell and a timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

In the present rejection, the Examiner alleges that Dye teaches a control means within the sequential compression device is used to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner proffers this allegation, with respect to the teachings of Dye, the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a proffered allegation.

The reason that the Examiner has failed to clearly and particularly point out where Dye teaches such a control means is because Dye fails to teach such a specific device. More

specifically, Dye fails to disclose any determination of the treatment specificity of any cell, let alone each cell. Moreover, Dye fails to disclose any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity. Thus, in view of the failure of Dye to provide any reasonable teachings directed to these determinations, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

In summary, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth in independent claim 85:

- (1) the determination of a treatment specificity of each cell; and
- (2) the determination of a timing sequence for inflation of each cell based on the determined treatment specificity.

F. ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 87

With respect to independent claim 87, independent claim 87 expressly sets forth a control device that determines a treatment specificity of each cell and a timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

In the present rejection, the Examiner alleges that Dye teaches a control means within the sequential compression device is used to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner proffers this allegation, with respect to the teachings of Dye, the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a proffered allegation.

The reason that the Examiner has failed to clearly and particularly point out where Dye teaches such a control means is because Dye fails to teach such a specific device. More specifically, Dye fails to disclose any determination of the treatment specificity of any cell, let alone each cell. Moreover, Dye fails to disclose any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity. Thus, in view of the failure of Dye to provide any reasonable teachings directed to these determinations, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

In summary, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth in independent claim 87:

- (1) the determination of a treatment specificity of each cell; and
- (2) the determination of a timing sequence for inflation of each cell based on the determined treatment specificity.

G. ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 92

With respect to independent claim 92 explicitly sets forth specific structure for the intra-cell compartments and the sleeve itself. More specifically, independent claim 92 expressly sets forth that the sleeve has a first intra-cell compartment center point circumference when said intra-cell compartments are deflated and a second intra-cell compartment center point circumference when said intra-cell compartments are inflated, said second intra-cell compartment center point circumference being less than said first intra-cell compartment center point circumference so as to provide for circumferential constriction, said first and second intra-cell compartment center point circumferences, each being defined as a line passing through each center points of each contiguous intra-cell compartment of an inflatable cell, and **the compartmental bonds of said intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of said intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction.**

In addressing the limitations of independent claim 92 directed to the circumferential dimensional relationship between inflated and deflated intra-cell compartments, the Examiner apparently contends that the claimed spatial relationship between the compartmental bonds of the intra-cell compartments during inflation is not taught by Dye or Schneider, but taught by Ericson, notwithstanding the fact that Ericson is void of any teaching or showing of such a relationship.

As clearly taught by Ericson at column 3, lines 13-19, the inner wall 24 "moves segmentally axially toward the center of the sleeve," thereby allowing the inner wall 24 to collapse upon the extremity within the sleeve. Ericson clearly teaches the sleeves is design to be used for a splint and thus, one would not want compression being applied to a fractured limb,

thereby subjecting the limb to further damage or injury.

More specifically, for the claimed spatial relationship of the present invention, namely the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, to be realized by the sleeve of Ericson, the outer wall **22** must, as the inner wall **24** moves inwardly, move outwardly. In comparison, Ericson explicitly teaches and illustrates that the outer wall **22** moves inwardly to form a triangular shape. This inward motion drives the bonds apart, as well as drives the bonds away from the center point of said intra-cell compartments, as the outer wall **22** goes from an arc shape to a more linear shape.

Only by realizing opposing movements; i.e., the outer wall **22** moves outwardly while the inner wall **24** moves inwardly; can the compartmental bonds **26** and **28** realize the claimed spatial relationship during inflation.

In summary, Ericson neither explicitly teaches nor illustrates such a spatial relationship (drawing together), but explicitly teaches an opposite spatial relationship (drawing apart). Moreover, such a spatial relationship would be contrary to the stated goals of Ericson's sleeve, namely the immobilization of an injured limb without causing further damage.

Therefore, Ericson fails to teach or suggest that the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth in independent claim 92. Moreover, since Ericson fails to teach or suggest that the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth in independent claim 92, the proposed combination of Dye in view of Schneider and Ericson must necessarily fail to teach or suggest that the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth in independent claim 92.

H. ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 97

With respect to independent claim 97 explicitly sets forth specific structure for the intra-cell compartments and the sleeve itself. More specifically, independent claim 97 expressly sets forth that the sleeve has a first intra-cell compartment center point circumference when said intra-cell compartments are deflated and a second intra-cell compartment center point circumference when said intra-cell compartments are inflated, said second intra-cell compartment center point circumference being less than said first intra-cell compartment center point circumference so as to provide for circumferential constriction, said first and second intra-cell compartment center point circumferences, each being defined as a line passing through each center points of each contiguous intra-cell compartment of an inflatable cell, and **the compartmental bonds of said intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of said intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction.**

In addressing the limitations of independent claim 97 directed to the circumferential dimensional relationship between inflated and deflated intra-cell compartments, the Examiner apparently contends that the claimed spatial relationship between the compartmental bonds of the intra-cell compartments during inflation is not taught by Dye or Schneider, but taught by Ericson, notwithstanding the fact that Ericson is void of any teaching or showing of such a relationship.

As clearly taught by Ericson at column 3, lines 13-19, the inner wall 24 “moves segmentally axially toward the center of the sleeve,” thereby allowing the inner wall 24 to collapse upon the extremity within the sleeve. Ericson clearly teaches the sleeves is design to be used for a splint and thus, one would not want compression being applied to a fractured limb, thereby subjecting the limb to further damage or injury.

More specifically, for the claimed spatial relationship of the present invention, namely the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential

constriction, to be realized by the sleeve of Ericson, the outer wall 22 must, as the inner wall 24 moves inwardly, move outwardly. In comparison, Ericson explicitly teaches and illustrates that the outer wall 22 moves inwardly to form a triangular shape. This inward motion drives the bonds apart, as well as drives the bonds away from the center point of said intra-cell compartments, as the outer wall 22 goes from an arc shape to a more linear shape.

Only by realizing opposing movements; i.e., the outer wall 22 moves outwardly while the inner wall 24 moves inwardly; can the compartmental bonds 26 and 28 realize the claimed spatial relationship during inflation.

In summary, Ericson neither explicitly teaches nor illustrates such a spatial relationship (drawing together), but explicitly teaches an opposite spatial relationship (drawing apart). Moreover, such a spatial relationship would be contrary to the stated goals of Ericson's sleeve, namely the immobilization of an injured limb without causing further damage.

Therefore, Ericson fails to teach or suggest that the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth in independent claim 97. Moreover, since Ericson fails to teach or suggest that the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth in independent claim 97, the proposed combination of Dye in view of Schneider and Ericson must necessarily fail to teach or suggest that the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth in independent claim 97.

J. ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 105

With respect to independent claim 105, independent claim 105 expressly sets forth a control device that determines a treatment specificity of each cell and a timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

In the present rejection, the Examiner alleges that Dye teaches a control means within the sequential compression device is used to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner proffers this allegation, with respect to the teachings of Dye, the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a proffered allegation.

The reason that the Examiner has failed to clearly and particularly point out where Dye teaches such a control means is because Dye fails to teach such a specific device. More specifically, Dye fails to disclose any determination of the treatment specificity of any cell, let alone each cell. Moreover, Dye fails to disclose any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity. Thus, in view of the failure of Dye to provide any reasonable teachings directed to these determinations, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

In summary, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth in independent claim 105:

- (1) the determination of a treatment specificity of each cell; and
- (2) the determination of a timing sequence for inflation of each cell based on the determined treatment specificity.

K. ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 112

With respect to independent claim 112 explicitly sets forth specific structure for the intra-cell compartments and the sleeve itself. More specifically, independent claim 112 expressly sets forth that the sleeve has a first center point circumference when the intra-cell compartments are deflated, and that the sleeve has a second center point circumference when the intra-cell compartments are inflated wherein the center point circumference is a line passing through each center point of each adjacent intra-cell compartment of said inflatable cell, and the second center point circumference is less than the first center point circumference, and **the compartmental bonds, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of said intra-cell compartments to decrease a distance**

therebetween, so as to provide for circumferential constriction.

In addressing the limitations of independent claim 112 directed to the circumferential dimensional relationship between inflated and deflated intra-cell compartments, the Examiner apparently contends that the claimed spatial relationship between the compartmental bonds of the intra-cell compartments during inflation is not taught by Dye or Schneider, but taught by Ericson, notwithstanding the fact that Ericson is void of any teaching or showing of such a relationship.

As clearly taught by Ericson at column 3, lines 13-19, the inner wall 24 “moves segmentally axially toward the center of the sleeve,” thereby allowing the inner wall 24 to collapse upon the extremity within the sleeve. Ericson clearly teaches the sleeve's design to be used for a splint and thus, one would not want compression being applied to a fractured limb, thereby subjecting the limb to further damage or injury.

More specifically, for the claimed spatial relationship of the present invention, namely the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, to be realized by the sleeve of Ericson, the outer wall 22 must, as the inner wall 24 moves inwardly, move outwardly. In comparison, Ericson explicitly teaches and illustrates that the outer wall 22 moves inwardly to form a triangular shape. This inward motion drives the bonds apart, as well as drives the bonds away from the center point of said intra-cell compartments, as the outer wall 22 goes from an arc shape to a more linear shape.

Only by realizing opposing movements; i.e., the outer wall 22 moves outwardly while the inner wall 24 moves inwardly; can the compartmental bonds 26 and 28 realize the claimed spatial relationship during inflation.

In summary, Ericson neither explicitly teaches nor illustrates such a spatial relationship (drawing together), but explicitly teaches an opposite spatial relationship (drawing apart). Moreover, such a spatial relationship would be contrary to the stated goals of Ericson's sleeve, namely the immobilization of an injured limb without causing further damage.

Therefore, Ericson fails to teach or suggest that the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance

therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth in independent claim 112. Moreover, since Ericson fails to teach or suggest that the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth in independent claim 112, the proposed combination of Dye in view of Schneider and Ericson must necessarily fail to teach or suggest that the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth in independent claim 112.

L. ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 122

With respect to independent claim 122 explicitly sets forth specific structure for the intra-cell compartments and the sleeve itself. More specifically, independent claim 122 expressly sets forth that the sleeve has a first center point circumference when the intra-cell compartments are deflated, and that the sleeve has a second center point circumference when the intra-cell compartments are inflated wherein the center point circumference is a line passing through each center point of each adjacent intra-cell compartment of said inflatable cell, and the second center point circumference is less than the first center point circumference, and the second center point circumference is less than the first center point circumference, and **the compartmental bonds, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of said intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction.**

In addressing the limitations of independent claim 122 directed to the circumferential dimensional relationship between inflated and deflated intra-cell compartments, the Examiner apparently contends that the claimed spatial relationship between the compartmental bonds of the intra-cell compartments during inflation is not taught by Dye or Schneider, but taught by Ericson, notwithstanding the fact that Ericson is void of any teaching or showing of such a relationship.

As clearly taught by Ericson at column 3, lines 13-19, the inner wall 24 “moves segmentally axially toward the center of the sleeve,” thereby allowing the inner wall 24 to collapse upon the extremity within the sleeve. Ericson clearly teaches the sleeve is designed to be used for a splint and thus, one would not want compression being applied to a fractured limb, thereby subjecting the limb to further damage or injury.

More specifically, for the claimed spatial relationship of the present invention, namely the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, to be realized by the sleeve of Ericson, the outer wall 22 must, as the inner wall 24 moves inwardly, move outwardly. In comparison, Ericson explicitly teaches and illustrates that the outer wall 22 moves inwardly to form a triangular shape. This inward motion drives the bonds apart, as well as drives the bonds away from the center point of said intra-cell compartments, as the outer wall 22 goes from an arc shape to a more linear shape.

Only by realizing opposing movements; i.e., the outer wall 22 moves outwardly while the inner wall 24 moves inwardly; can the compartmental bonds 26 and 28 realize the claimed spatial relationship during inflation.

In summary, Ericson neither explicitly teaches nor illustrates such a spatial relationship (drawing together), but explicitly teaches an opposite spatial relationship (drawing apart). Moreover, such a spatial relationship would be contrary to the stated goals of Ericson's sleeve, namely the immobilization of an injured limb without causing further damage.

Therefore, Ericson fails to teach or suggest that the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth in independent claim 122. Moreover, since Ericson fails to teach or suggest that the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth in independent claim 122, the proposed combination of Dye in view of Schneider and Ericson must necessarily fail to

teach or suggest that the compartmental bonds of the intra-cell compartments, during inflation, are drawn towards each other to decrease a distance therebetween and towards the center point of the intra-cell compartments to decrease a distance therebetween, so as to provide for circumferential constriction, as set forth in independent claim 122.

M. ARGUMENTS WITH RESPECT TO INDEPENDENT CLAIM 135

With respect to independent claim 135, independent claim 135 expressly sets forth a control device that determines a treatment specificity of each cell and a timing sequence for inflating of each cell based on the determined treatment specificity of each cell.

In the present rejection, the Examiner alleges that Dye teaches a control means within the sequential compression device is used to determine a treatment specificity of each cell and determines a timing sequence for inflation of each cell based on the determined treatment specificity. Although the Examiner proffers this allegation, with respect to the teachings of Dye, the Examiner has failed to point to any particular passage in Dye or illustrated component that would support such a proffered allegation.

The reason that the Examiner has failed to clearly and particularly point out where Dye teaches such a control means is because Dye fails to teach such a specific device. More specifically, Dye fails to disclose any determination of the treatment specificity of any cell, let alone each cell. Moreover, Dye fails to disclose any determination of the timing sequence for inflation of any cell, let alone each cell, based on the determined treatment specificity. Thus, in view of the failure of Dye to provide any reasonable teachings directed to these determinations, the allegations by the Examiner can only be concluded as conjecture, without any clear support in the prior art.

In summary, contrary to the Examiner's allegations, the proposed combination of Dye in view of Schneider and Ericson fails to teach or suggest, as set forth in independent claim 135:

- (1) the determination of a treatment specificity of each cell; and
- (2) the determination of a timing sequence for inflation of each cell based on the determined treatment specificity.

N. ARGUMENTS WITH RESPECT TO DEPENDENT CLAIMS 30-33, 35, 39-41, 74, 78-81, 86-90, 93-95, 98-103, 108-110, 113-116, 118-121, 123-128, 131-133, and 138-140

With respect to dependent claims 30-33, 35, 39-41, 74, 78-81, 86-90, 93-95, 98-103, 108-110, 113-116, 118-121, 123-128, 131-133, and 138-140, the Applicants, for the sake of brevity, will not address the reasons supporting patentability for each of these individual dependent claims, as these claims depend directly or indirectly from the various allowable independent claims for the reasons set forth above. The Applicant reserves the right to address the patentability of each of these dependent claims at a later time, should it be necessary.

Accordingly, in view of the remarks set forth above, the Examiner is respectfully requested to reconsider and withdraw this rejection under 35 U.S.C. §103.

IV. REJECTION of CLAIMS 34, 42, 82, 91, 104, 111, 117, and 134 under 35 U.S.C. §103

With respect to dependent claims 34, 42, 82, 91, 104, 111, 117, and 134, the Applicants, for the sake of brevity, will not address the reasons supporting patentability for each of these individual dependent claims, as these claims depend directly or indirectly from the various allowable independent claims for the reasons set forth above. The Applicant reserves the right to address the patentability of each of these dependent claims at a later time, should it be necessary.

Accordingly, in view of the remarks set forth above, the Examiner is respectfully requested to reconsider and withdraw this rejection under 35 U.S.C. §103.

V. REJECTION of CLAIMS 37, 38, 76, 77, 106, 107, 136, and 137 under 35 U.S.C. §103

With respect to dependent claims 37, 38, 76, 77, 106, 107, 136, and 137, the Applicants, for the sake of brevity, will not address the reasons supporting patentability for each of these individual dependent claims, as these claims depend directly or indirectly from the various allowable independent claims for the reasons set forth above. The Applicant reserves the right to address the patentability of each of these dependent claims at a later time, should it be necessary.

Accordingly, in view of the remarks set forth above, the Examiner is respectfully requested to reconsider and withdraw this rejection under 35 U.S.C. §103.

VI. REJECTION of CLAIM 141 under 35 U.S.C. §103

With respect to dependent claim 141, the Applicants, for the sake of brevity, will not address the reasons supporting patentability for this individual dependent claim, as this claim depends directly or indirectly from an allowable independent claim for the reasons set forth above. The Applicant reserves the right to address the patentability of this dependent claim at a later time, should it be necessary.

Accordingly, in view of the remarks set forth above, the Examiner is respectfully requested to reconsider and withdraw this rejection under 35 U.S.C. §103.

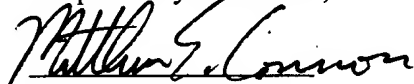
VII. ENTRY of AMENDMENTS under 37 C.F.R. 1.116

The Applicants respectfully request the Examiner enter the above amendments under 37 C.F.R. 1.116 for the following reasons. As clearly shown above, the amendments merely and **ONLY** address the various objections and/or informalities set forth by the Examiner. Moreover, the amendments place the claims in condition for allowance without raising any new issues of materiality. Moreover, the amendments clearly reduce the outstanding issues in the present application and place the application in better condition for appeal. Thus, entry of these amendments under 37 C.F.R. 1.116 is proper and respectfully requested.

VIII. CONCLUSION

Accordingly, in view of the amendments and remarks set forth above, the Examiner is respectfully requested to reconsider and withdraw all the present rejections. Also, an early indication of allowability is earnestly solicited.

Respectfully submitted,



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